

WEAR-RESISTANT COMPOSITE RINGS FOR JEWELRY, MEDICAL OR INDUSTRIAL DEVICES AND MANUFACTURING METHOD THEREFOR

ABSTRACT OF THE DISCLOSURE

A method for manufacturing finger rings, bracelets, earrings, body jewelry and the like which have at least one curved surface, and which are inlaid with a precious metal or which have which have been subjected to deposition thereon of a metal compound via chemical vapor deposition. Ring blanks are placed in a spinning fixture and subjected to abrasion against at least one curved abrasive surface. For comfort rings, the inner surface is formed as a continuous curve. For rings having inlaid malleable precious metal, the precious metal is inserted in either a straight-wall or undercut wall. Ring blanks having straight-wall grooves can be formed using conventional casting processes. The precious metal is inlaid in the groove by one of several processes, which may include hammering, rolling, or pressing. For a preferred embodiment of the process, the inlaying process involves laser welding of joints and burnishing of the inlaid metal, and cutting the inlaid metal in a lathe to about the level of the mouth of the groove.